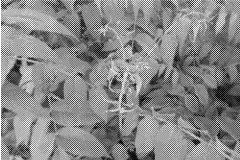
[HYPERLINK "https://www.thegazette.com/subject/news/business/drifting-dicamba-soybeans-damage-iowa-weedkiller-20201005"]

Dicamba damage in Iowa 'most extensive' in decades

It's tough to prove source of damage, but complaints on the rise [HYPERLINK "applewebdata://14620DB9-4ED4-4DBF-82D5-D831C8751A64/section/blogs?staffID=Jordan"]

Mon., October 05, 2020 Oct. 5, 2020 at 8:00AM



Leaves of a walnut tree show curling, a symptom typical of damage from weedkillers, including dicamba. (Photo supplied by Bob Hartzler)

Damage to soybeans and trees from drifting weedkillers — particularly dicamba — is the "most extensive" this year since the popular herbicide was introduced in the 1960s, according to experts.

The distinctive cupping and curling of soybean leaves exposed to airborne pesticides has been reported by agronomists across the state and a record 329 pesticide misuse complaints have been filed with the lowa Department of Agriculture and Land Stewardship.

"This is not the type of injury we have observed in the past; it's at a landscape level," wrote Bob Hartzler and Prashant Jha, Iowa State University agronomy faculty and extension weed specialists, in a [HYPERLINK "https://crops.extension.iastate.edu/blog/bob-hartzler-prashant-jha/dicamba-2020-what-went-wrong-iowa"]

With less leaf surface area exposed to the sun, plants can't produce as much food through photosynthesis and it hinders growth. And it's not just soybeans taking a hit.

lowa Department of Natural Resources Forester Mark Vitosh, who covers a seven-county district including Linn and Johnson counties, said he's seen more cupping of tree leaves, especially redbuds, box elder and red oak, in the past five years than in the previous 15 years. Some of the damage might be from other herbicides or aphids, Vitosh said.

Dicamba use in Iowa

Dicamba, the active ingredient in several name-brand herbicides, has been used in Iowa for decades to control broad-leaved weeds, including waterhemp. The weedkiller is ground-applied, but because dicamba is more volatile than some pesticides, it can evaporate after it lands and drift to nearby fields and forests.

That's what happened in 2016, when dicamba sprayed on a Monsanto seed field in Story County drifted to a soybean field owned by Kevin Larson and his family.

"My son's field was decimated," Larson.

Larson, 66, was pretty sure dicamba was to blame because he'd used the weedkiller decades earlier. He called Monsanto officials, who came out to investigate and reported back that the damage wasn't caused by dicamba, but by Larson's son's farming practices.

"I knew that was, quite frankly, bull----," Larson said.

He called Hartzler, who came out to review the damage. Hartzler wrote Monsanto a letter. "Within 20 minutes Monsanto was on the phone with my son that they wanted to settle," Larson said. "What upset me was not that it happened, but that they wanted to walk away from it. It would have cost my son \$20,000 if we hadn't settled."

Complaints, lawsuits

Larson filed pesticide misuse complaints with the state in 2017, 2018 and 2019 and the lowa Agriculture Department confirmed damage two of those years, he said. Larson did not find any damage this year.

A farmer or tree owner with damage must [HYPERLINK "https://iowaagriculture.gov/pesticide-bureau/pesticide-use-investigations-and-enforcement"] within 60 days after the alleged damage and before 25 percent of the crop is harvested. About two-thirds of the complaints filed in 2020 are related to a growth-regulator herbicides.

THIS IS THE MIDPOINT

"If you have sensitive soybeans, it's difficult to prove if there was a yield loss," Hartzler said. "Even if there was a yield loss, it's hard to get reimbursed for that loss."

A Missouri jury in February ordered Bayer, which [HYPERLINK

"https://www.businessinsider.com/monsanto-beyer-merge-drop-monsanto-name-2018-6" $\$ ":~:text=genetically%20modified%20organisms.-

,The%20German%20drugmaker%20and%20chemical%20company%20Bayer%20has%20finalize d%20a,up%20the%20agricultural%20giant%20Monsanto.&text=Monsanto%20will%20no%20lo nger%20be,part%20of%20the%20Bayer%20portfolio.%22"], and BASF to pay \$250 million in punitive damages after finding drift from the companies' weedkiller caused millions of dollars damage to Bader Farms, Missouri's largest peach farm, the [HYPERLINK

"https://www.stltoday.com/business/local/jury-awards-265-million-to-bader-farms-in-lawsuit-against-bayer-basf/article_0115e1ba-4dbd-5414-9426-662b46e467d6.html"]

This was on top of \$15 million in actual damages to Bader Farms, whose attorneys argued Bayer and BASF knew their product was drifting so they made resistant soybeans — thereby profiting on both ends.

[HYPERLINK "https://media.bayer.com/baynews/baynews.nsf/id/Bayer-announces-agreements-to-resolve-major-legacy-Monsanto-litigation"] it would pay an additional \$400 million to settle a class-action lawsuit involving many other Missouri plaintiffs.

There has not been similar litigation in Iowa.

Possible changes

Product labels for dicamba products forbid spraying on windy days, but a wind the next day can still spread the airborne chemical, Hartzler said. Many farmers have planted soybeans genetically modified to be resistant to dicamba, which allows applications later in the season and increases the drift problem.

In June, a federal appeals court [HYPERLINK "https://cdn.ca9.uscourts.gov/datastore/opinions/2020/06/03/19-70115.pdf"]

"In my opinion, that was the right decision, but it was absolutely the wrong time," Hartzler said. The ruling happened after many farmers already had purchased their herbicides or invested in dicamba-resistant soybeans, he said. The U.S. Environmental Protection Agency said farmers could [HYPERLINK "https://cen.acs.org/food/agriculture/EPA-says-farmers-use-dicamba/98/i23" \l

":~:text=On%20June%208%2C%20the%20US,their%20current%20stocks%20through%20July.&t ext=The%20order%20from%20EPA%20flies%20in%20the%20face%20of%20the%20Court%20d ecision."]

Bayer, BASF and Corteva, the companies that make dicamba, say they are developing new formulas less likely to drift, but Hartzler isn't confident the changes will be significant enough. Larson said he'd like to see dicamba products discontinued.

"No matter how it's used, there will be issues with it," he said. "You can spray it one day and three to four days later you can have extreme heat and it can volatilize."

If the product still is allowed, Larson thinks the Iowa Agriculture Department should set a date in the year after which dicamba application is illegal. Now Iowa allows dicamba application up to 45 days after planting. This could limit volatility in warmer months, Larson said.

Bayer released [HYPERLINK "https://www.agriculture.com/news/crops/bayer-responds-to-us-court-of-appeals-dicamba-ruling"] in June:

"Know that Bayer stands fully behind XtendiMax herbicide. We are proud of our role in bringing innovations like XtendiMax forward to help growers safely, successfully, and sustainably protect their crops from weeds. We will continue working with the EPA, growers, academics, and others to provide long-term access to this important tool."

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